

WHAT IS CLAIMED IS:

1. An ultrasonic diagnosis apparatus, comprising:
an ultrasonic probe for transmitting/receiving
an ultrasonic wave to/from a specific portion within
5 a subject to be diagnosed to whom a contrast medium has
been introduced;

a driving signal generator for generating
a driving signal of said ultrasonic probe; and

a controller for controlling said driving signal
10 generator in such a manner that said ultrasonic probe
transmits a first ultrasonic wave used to destroy
bubbles of said contrast medium and a second ultrasonic
wave used to destroy at least part of remaining bubbles
of said contrast medium that were not destroyed by said
15 first ultrasonic wave and are flowing in blood in
a blood vessel within said subject to be diagnosed.

2. The ultrasonic diagnosis apparatus according
to claim 1, wherein said controller controls said
driving signal generator in such a manner that said
20 second ultrasonic wave is transmitted at a higher sound
pressure than said first ultrasonic wave.

3. The ultrasonic diagnosis apparatus according
to claim 1, wherein said controller controls said
driving signal generator in such a manner that said
25 second ultrasonic wave is transmitted at a lower
frequency than said first ultrasonic wave.

4. The ultrasonic diagnosis apparatus according

to claim 1, wherein said controller controls said driving signal generator in such a manner that said first ultrasonic wave or said second ultrasonic wave is transmitted through intermittent transmissions at
5 predetermined time intervals needed to accumulate said contrast medium in said subject to be diagnosed.

5. The ultrasonic diagnosis apparatus according to claim 4, further comprising a display device for displaying, when a plurality of ultrasonic images
10 are acquired by said intermittent transmissions, a plurality of ultrasonic images based on said first ultrasonic wave concurrently or a plurality of ultrasonic images based on said second ultrasonic wave concurrently.

15 6. The ultrasonic diagnosis apparatus according to claim 5, wherein said display device arranges said plurality of ultrasonic images to be displayed concurrently time-sequentially and then displays said plurality of ultrasonic images.

20 7. The ultrasonic diagnosis apparatus according to claim 1, wherein said first ultrasonic wave is at a sound pressure at which said contrast medium present in blood in the blood vessel and tissue fluid and lymph outside the blood vessel within said subject to be
25 diagnosed is destroyed.

8. The ultrasonic diagnosis apparatus according to claim 1, wherein said driving signal generator is

controlled in such a manner that said first ultrasonic wave is transmitted under a transmission condition under which bubbles of said contrast medium of a small diameter are destroyed but bubbles of said contrast medium of a large diameter are hardly destroyed, and said second ultrasonic wave is transmitted under a transmission condition under which bubbles of said contrast medium of a small diameter and a large diameter are destroyed.

9. A method of controlling an ultrasonic diagnosis apparatus for controlling a driving signal generator in such a manner that an ultrasonic probe, which transmits/receives an ultrasonic wave to/from a specific portion within a subject to be diagnosed to whom a contrast medium has been introduced, transmits a first ultrasonic wave used to destroy bubbles of said contrast medium and a second ultrasonic wave used to destroy at least part of remaining bubbles of said contrast medium that were not destroyed by said first ultrasonic wave and are flowing in blood in a blood vessel within said subject to be diagnosed.

10. The method of controlling an ultrasonic diagnosis apparatus according to claim 9, wherein said second ultrasonic wave has a higher sound pressure than said first ultrasonic wave.

11. The method of controlling an ultrasonic diagnosis apparatus according to claim 9, wherein said

second ultrasonic wave has a lower frequency than said first ultrasonic wave.

12. The method of controlling an ultrasonic diagnosis apparatus according to claim 9, wherein said driving signal generator is controlled in such a manner that said first ultrasonic wave or said second ultrasonic wave is transmitted through intermittent transmissions at predetermined time intervals needed to accumulate said contrast medium in said subject to be diagnosed.

13. The method of controlling an ultrasonic diagnosis apparatus according to claim 12, wherein, when a plurality of ultrasonic images are acquired by said intermittent transmissions, a display is further presented, in which a plurality of ultrasonic images based on said first ultrasonic wave are displayed concurrently or a plurality of ultrasonic images based on said second ultrasonic wave are displayed concurrently.

14. The method of controlling an ultrasonic diagnosis apparatus according to claim 13, wherein said display is a display in which said plurality of ultrasonic images to be displayed concurrently are arranged time-sequentially.

15. The method of controlling an ultrasonic diagnosis apparatus according to claim 9, wherein said first ultrasonic wave is at a sound pressure at which

said contrast medium present in blood in the blood vessel and tissue fluid and lymph outside the blood vessel within said subject to be diagnosed is destroyed.

5 16. The method of controlling an ultrasonic diagnosis apparatus according to claim 9, wherein said driving signal generator is controlled in such a manner that said first ultrasonic wave is transmitted under a transmission condition under which bubbles of said
10 contrast medium of a small diameter are destroyed but bubbles of said contrast medium of a large diameter are hardly destroyed, and said second ultrasonic wave is transmitted under a transmission condition under which bubbles of said contrast medium of a small diameter and
15 a large diameter are destroyed.